

EXAMPLE SCENARIO 8
Option 1

TABLE 7.3.RME
CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS
REASONABLE MAXIMUM EXPOSURE
The Dean Company

Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Child/Adult

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations				Non-Cancer Hazard Calculations				Hazard Quotient		
					Value	Units	Intake/Exposure Concentration		CSF/Unit Risk		Cancer Risk	Intake/Exposure Concentration		RfD/RfC			
							Value	Units	Value	Units		Value	Units	Value	Units		
Soil	Soil	Soil at Site 1	Ingestion	4,4-DDD	0.452	mg/kg	7.1E-07	mg/kg/day	2.4E-01	1/mg/kg/day	2E-07	--	--	--	--	--	
				4,4'-DDE	6.8	mg/kg	1.1E-05	mg/kg/day	3.4E-01	1/mg/kg/day	4E-06	--	--	--	--	--	
				4,4'-DDT	28.6	mg/kg	4.4E-05	mg/kg/day	3.4E-01	1/mg/kg/day	2E-05	--	--	--	--	--	
				Aluminum	9964	mg/kg	1.6E-02	mg/kg/day	NA	NA	--	--	--	--	--	--	
				Manganese	201	mg/kg	3.2E-05	mg/kg/day	NA	NA	--	--	--	--	--	--	
			Dermal	Thallium	1.2	mg/kg	1.9E-06	mg/kg/day	NA	NA	--	--	--	--	--	--	
				Exp. Route Total							2E-05					--	
				4,4-DDD	0.452	mg/kg	3.0E-07	mg/kg/day	2.7E-01	1/mg/kg/day	8E-08	--	--	--	--	--	
				4,4'-DDE	6.8	mg/kg	4.5E-06	mg/kg/day	3.8E-01	1/mg/kg/day	2E-06	--	--	--	--	--	
				4,4'-DDT	28.6	mg/kg	1.9E-05	mg/kg/day	3.8E-01	1/mg/kg/day	7E-06	--	--	--	--	--	
			Exposure Point Total	Aluminum	9964	mg/kg	6.7E-04	mg/kg/day	NA	NA	--	--	--	--	--	--	
				Manganese	201	mg/kg	1.3E-05	mg/kg/day	NA	NA	--	--	--	--	--	--	
				Thallium	1.2	mg/kg	7.9E-08	mg/kg/day	NA	NA	NA	--	--	--	--	--	
				Exp. Route Total							9E-06	--	--	--	--	--	
				Exposure Point Total							3E-05					--	
			Exposure Medium Total								3E-05					--	
											3E-05					--	
Medium											Total of Receptor Risks Across All Media	3E-05				Total of Receptor Hazards Across All Media	--

Note: Child/Adult cancer risk was calculated as the sum of the Child cancer risk (Table 7.2.RME) and the Adult cancer risk (Table 7.1.RME).